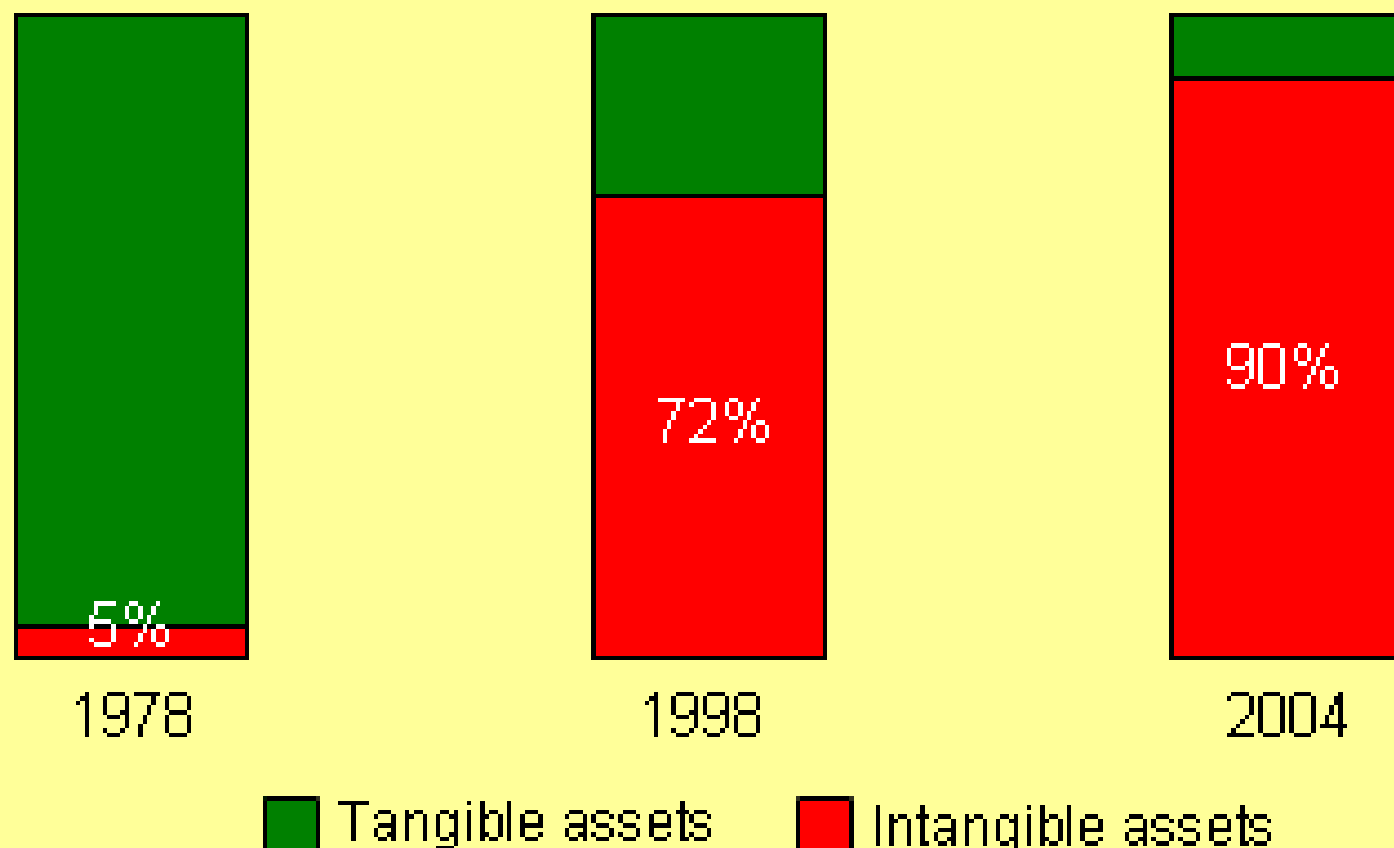# Intellectual Assets
Major Value Drivers of Business in the Modern Economy

Relative significance of intangible assets –
knowledge, know-how, business models, processes, people, etc. –
compared to their tangible peers in business

5% 1978

72% 1998

90% 2004

■ Tangible assets   ■ Intangible assets

Source of data: Value-Based Management.net

1000ventures.com

Effectively Scaling Up Innovations in Education

IN-DOE TA 2008

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National Implementation Research Network
FPG Child Development Institute, UNC-Chapel Hill

nirn National Implementation Research Network

NCLB Act & IDEA 2004

- **Implementation of scientifically based research**

- **Ensure that school personnel have the skills and knowledge necessary to improve the academic achievement and functional performance of children, including the use of scientifically based instructional practices, to the maximum extent possible**

Education

- 60 million kids

- 6 million teachers and staff

- 100,000 schools

- 3,143 counties

- 60 federal jurisdictions

Key Issues

Four big issues have emerged:

- How to choose <u>what</u> to implement

- How to <u>implement</u> new education practices so they actually produce the intended benefits to students (effective)

- How to <u>scale up</u> effective practices so they are available to all students who could benefit from them (access)

- How to <u>align</u> system structures and functions to fully support scale up efforts as part of "education as usual" (sustainable)

Problem

- Too often, the choice of an intervention has little to do with the quality or weight of the evidence regarding practices

- Decisions are made for a variety of reasons not related to the data about effectiveness (e.g. philosophy, values, comfort, availability, finances)
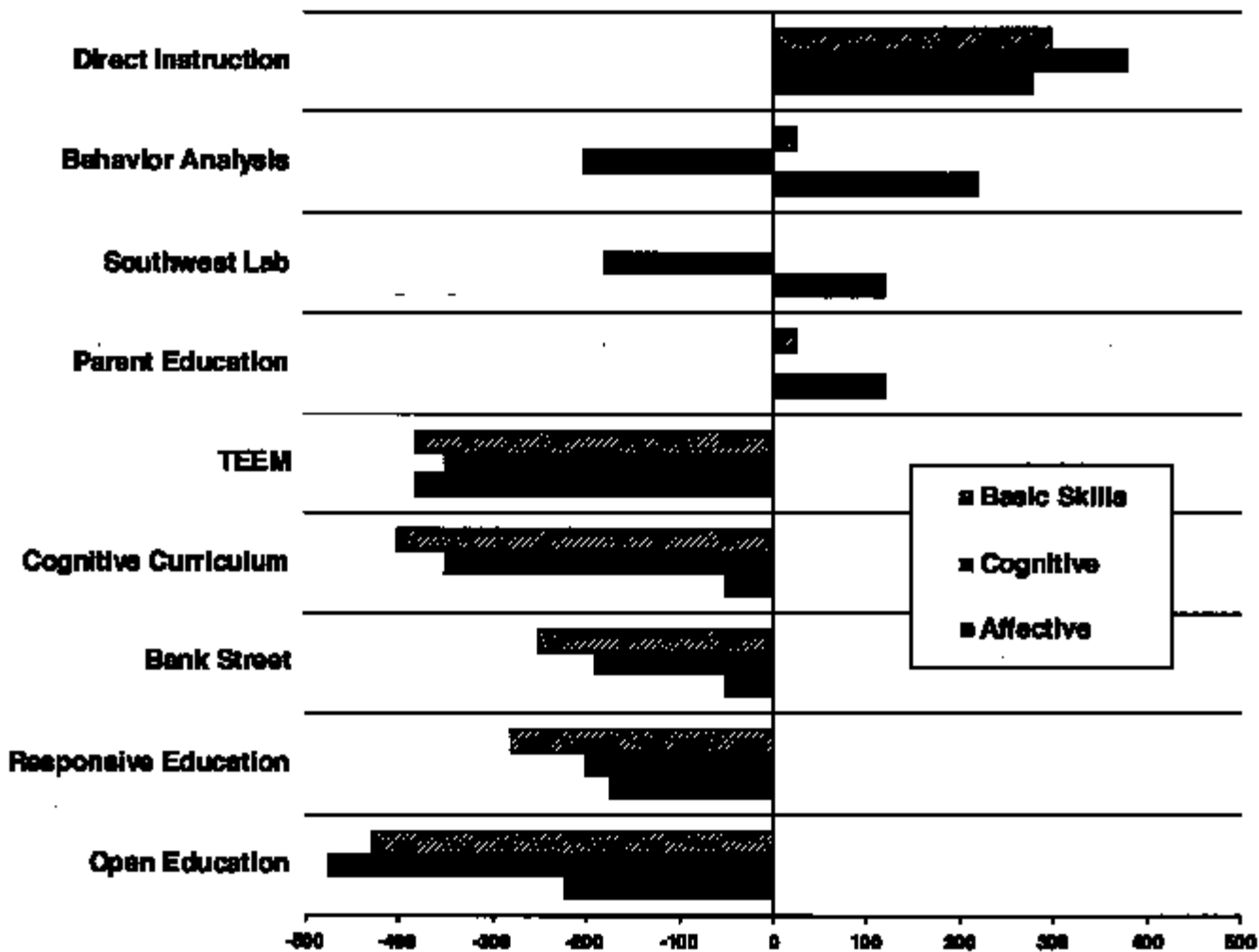
Follow Through Programs

Figure 1: *This figure shows the average effects of nine Follow Through models on measures of basic skills (word knowledge, spelling, language, and math computation), cognitive-conceptual skills (reading comprehension, math concepts, and math problem solving) and self-concept. This figure is adapted from Engelmann, S. and Carnine, D. (1982),* Theory of Instruction: Principles and applications. *New York: Irvington Press.*

Intervention Science

Scientists have produced programs and practices that can help students, communities, and education systems

- What Works Clearinghouse (http://ies.ed.gov/ncee/wwc/)

- NREPP (http://www.nrepp.samhsa.gov/)

- Colorado Blueprints (http://www.colorado.edu/cspv/index.html)

- Education research journals/ American Education Research Association (http://www.aera.net/)/ J. of Evidence-Based Practices in Schools

Choose Interventions

- **Effect size 0.50 or greater**

- **Must be "worth the effort" to scale up**

- **Eventually want to see big changes in student outcomes across the State**

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Problem

- **Students cannot benefit from interventions they do not experience**

What Works

		IMPLEMENTATION	
		Effective	**NOT Effective**
INTERVENTION	**Effective**	**Student Benefits**	
	NOT Effective		

Implementation Science

- Human service prevention and treatment program <u>literature</u> (e.g. education, substance abuse, MH, justice, health)

- <u>Literature</u> re: advanced manufacturing technologies, business, management, agriculture, engineering

- Successful <u>practices</u> on a national scale (e.g. SW-PBS, SFA, MST, FFT, NFP, SE, IDDT, DBT, MI, PMTO, Incredible Years)

Implementation Science

- **Letting it happen**
  - **Recipients are accountable**

- **Helping it happen**
  - **Recipients are accountable**

- **Making it happen**
  - **Implementation teams are accountable**

Based on Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou, 2004

Implementation Science

Excellent experimental evidence for what <u>does not work</u>

☛ **<u>Diffusion/dissemination</u> of information by itself does not lead to successful implementation** (research literature, mailings, promulgation of practice guidelines)

☛ **<u>Training</u> alone, no matter how well done, does not lead to successful implementation**

Implementation Science

Excellent evidence for what <u>does not work</u>

☛ **Implementation by <u>laws/ compliance</u> by itself does not work**

☛ **Implementation by "<u>following the money</u>" by itself does not work**

☛ **Implementation <u>without changing</u> supporting roles and functions does not work**
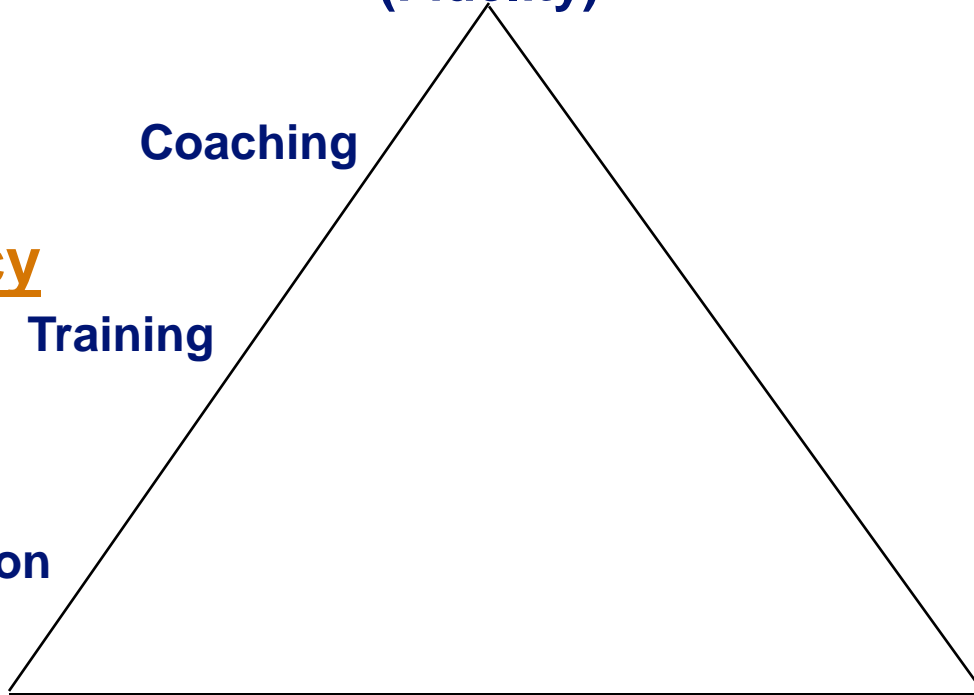
Paul Nutt (2002). *Why Decisions Fail*

Student Benefits

Performance Assessment
(Fidelity)

Coaching

Competency

Training

Selection

Student Benefits

Performance Assessment
(Fidelity)

Coaching

Systems
Intervention

Competency

Organization

Training

Facilitative
Administration

Selection

Decision Support
Data System

© Fixsen & Blase, 2008

Student Benefits

Performance Assessment
(Fidelity)

Competency

Coaching

Systems
Intervention

Adaptive

Training

Facilitative
Administration

Selection

Technical

Decision Support
Data System

Organization

Leadership

© Fixsen & Blase, 2008

Student Benefits

Performance Assessment
(Fidelity)

Coaching

Systems
Intervention

Competency

Adaptive

Organization

Training

Facilitative
Administration

Integrated &
Compensatory

Selection

Decision Support
Data System

Technical

Leadership

© Fixsen & Blase, 2008

Student Benefits

Stages of Implementation

- **Exploration**

- **Installation**

- **Initial Implementation**

- **Full Implementation**

- **Innovation**

- **Sustainability**

Performance Assessment (Fidelity)

Coaching

Systems Intervention

2 – 4 Years

Innovation

Adaptive

Organization

Training

Facilitative Administration

Selection

Integrated & Compensatory

Decision Support Data System

Technical

Leadership

Fixsen, Naoom, Blase, Friedman, & Wallace, 2005

Key Issues

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School Wide PBS

SWPBS Schools

School Wide PBS

SWPBS Schools
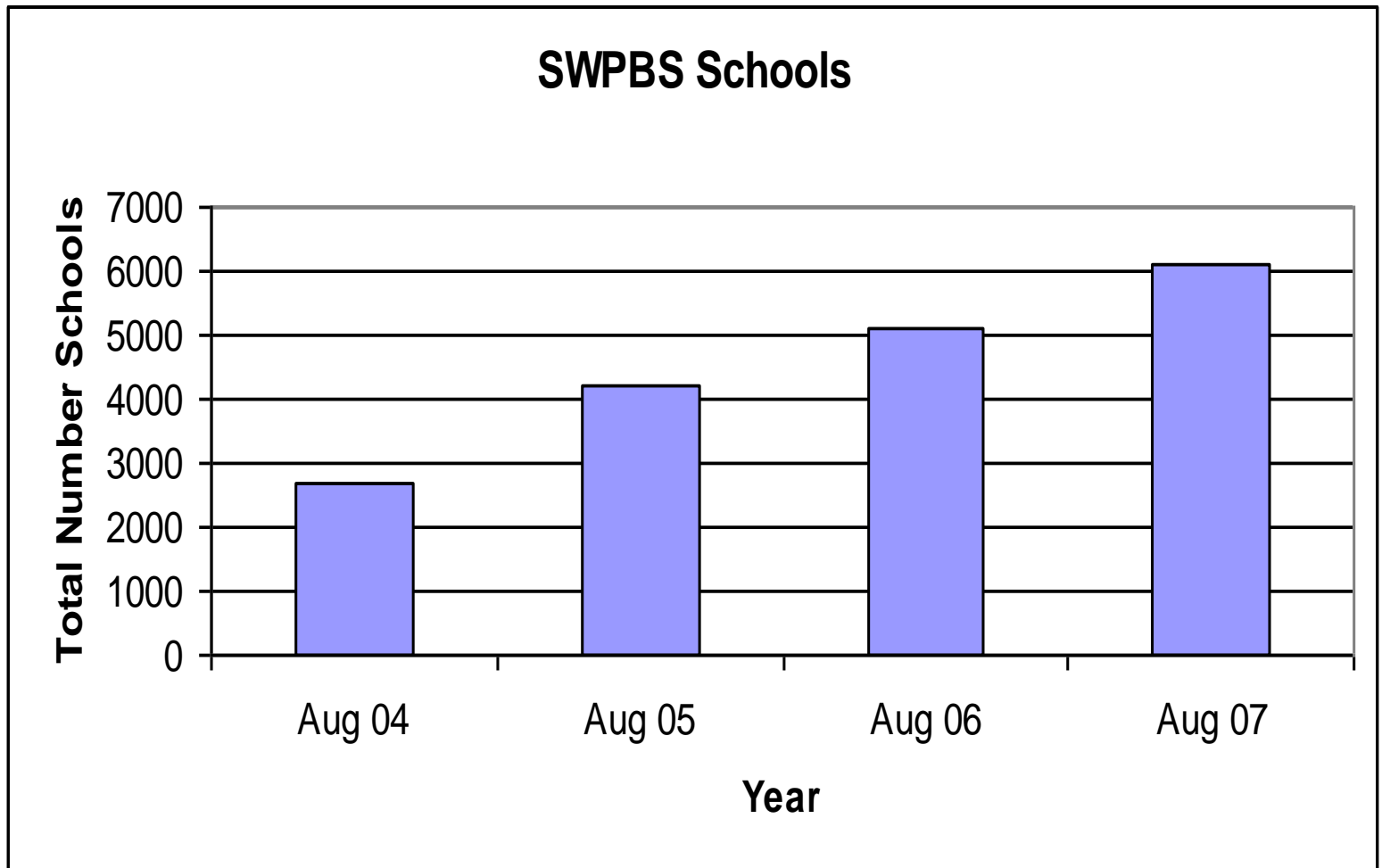
6% of all schools
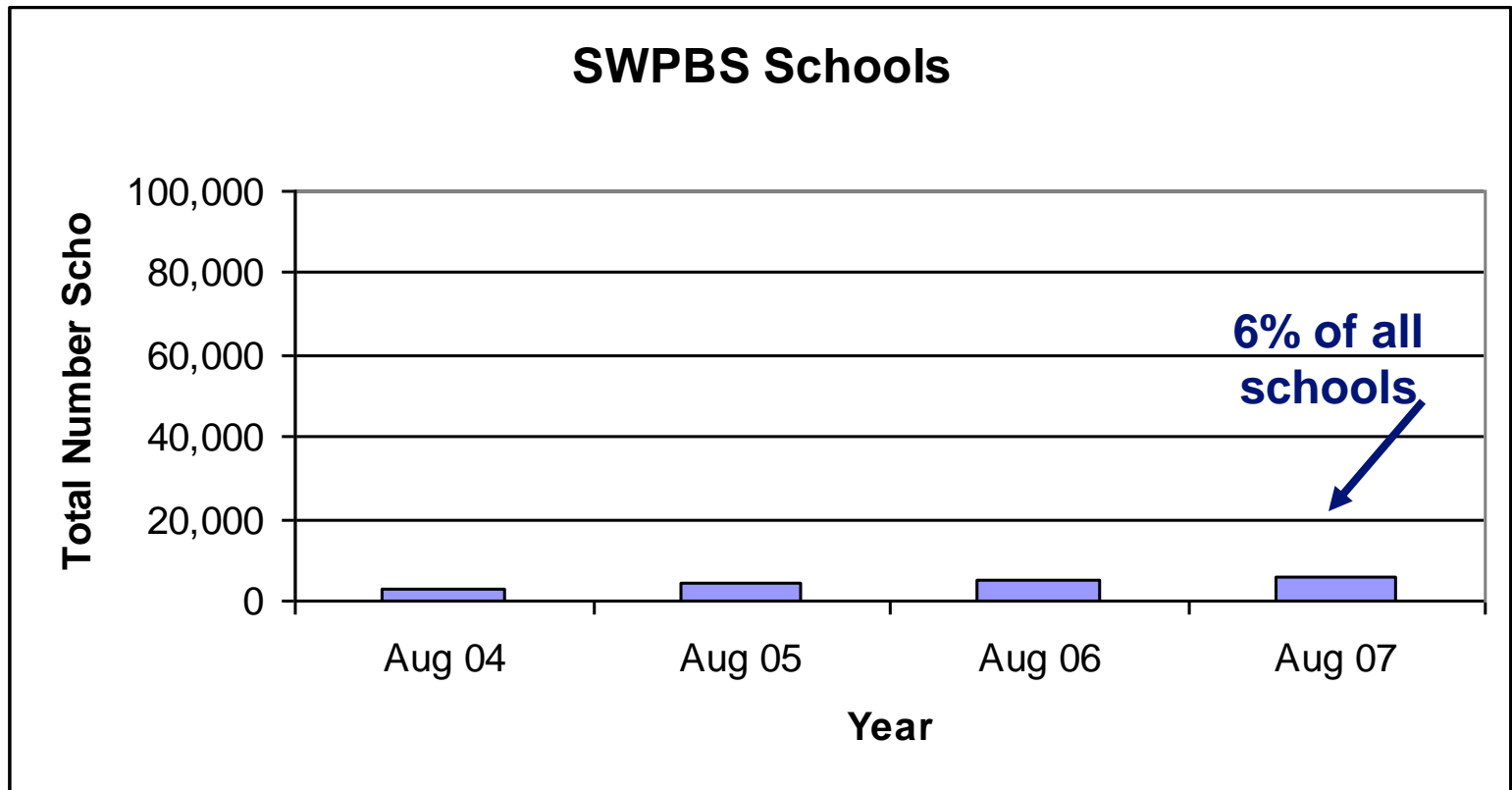
Problem

- **EBPs now are boutique operations**

    - **Now have convincing demonstrations that EBPs <u>can</u> work in the real world**

    - **Pretty neat but not used on a sustainable <u>scale</u> sufficient to <u>solve social problems</u>**

- **What will it take to make <u>statewide use</u> of education innovations that produce <u>increasingly effective</u> outcomes for the next 50 years?**

    - **Start with the end in mind**

Scale Up

- **To scale up <u>interventions</u> we must first scale up implementation capacity**

- **Building <u>implementation capacity</u> is essential to maximizing the use of EBPs and other innovations**

Scale Up

- **Interventions that are and remain effective through several generations of teachers, principals, superintendents, and state and national leaders**

- **Implementation supports that are and remain effective through several generations of trainers, coaches, evaluators, administrators, and state leaders**

Scale Up

- **Develop an infrastructure for implementation in each State (Implementation Teams)**

- **To support the effective use of evidence-based programs and other innovations in schools and education systems**

- **So teachers can better educate students each year for the next 50 years**
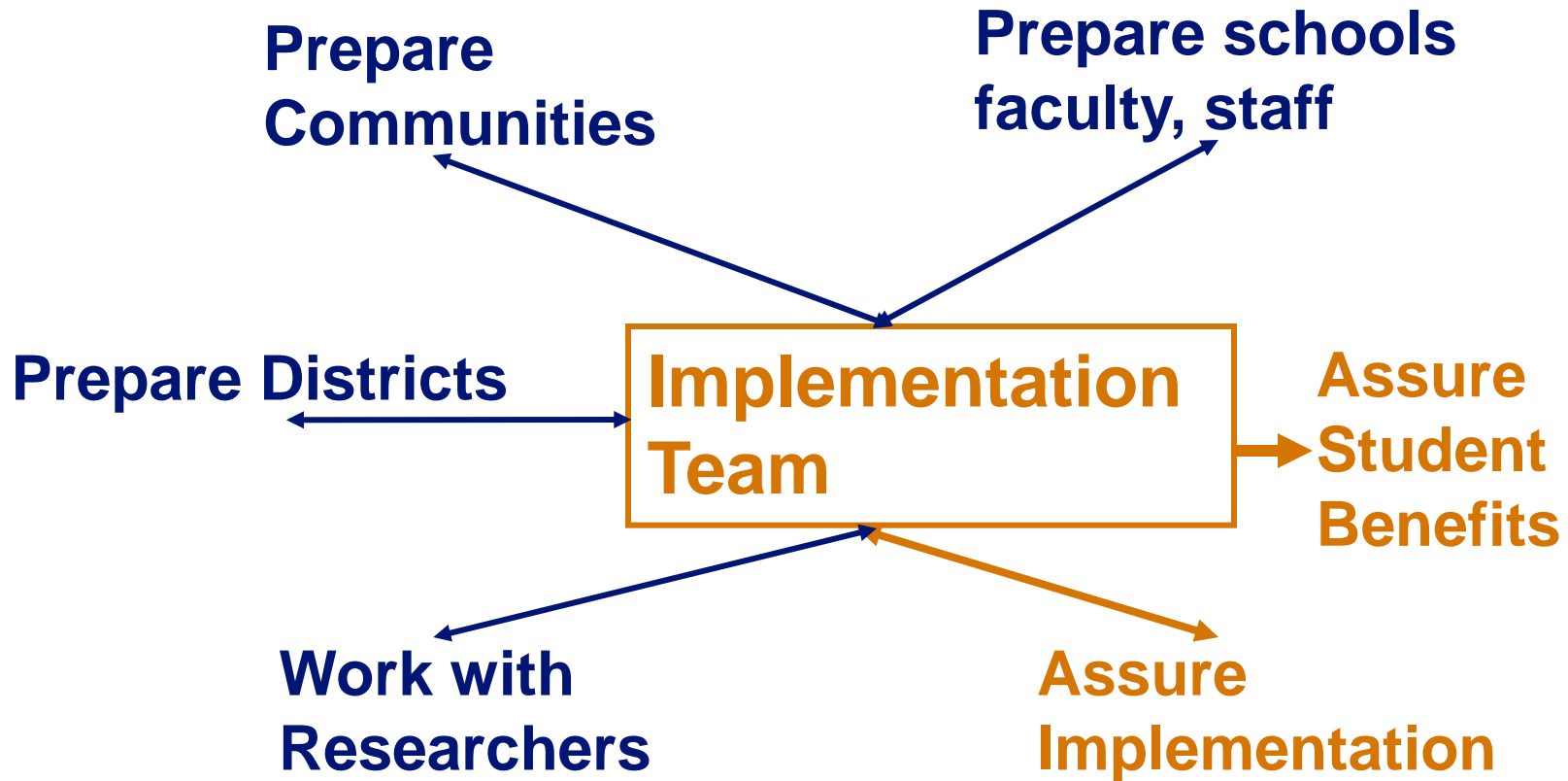
Implementation Team

☞ **A group that <u>knows the innovation</u> very well (formal and practice knowledge)**
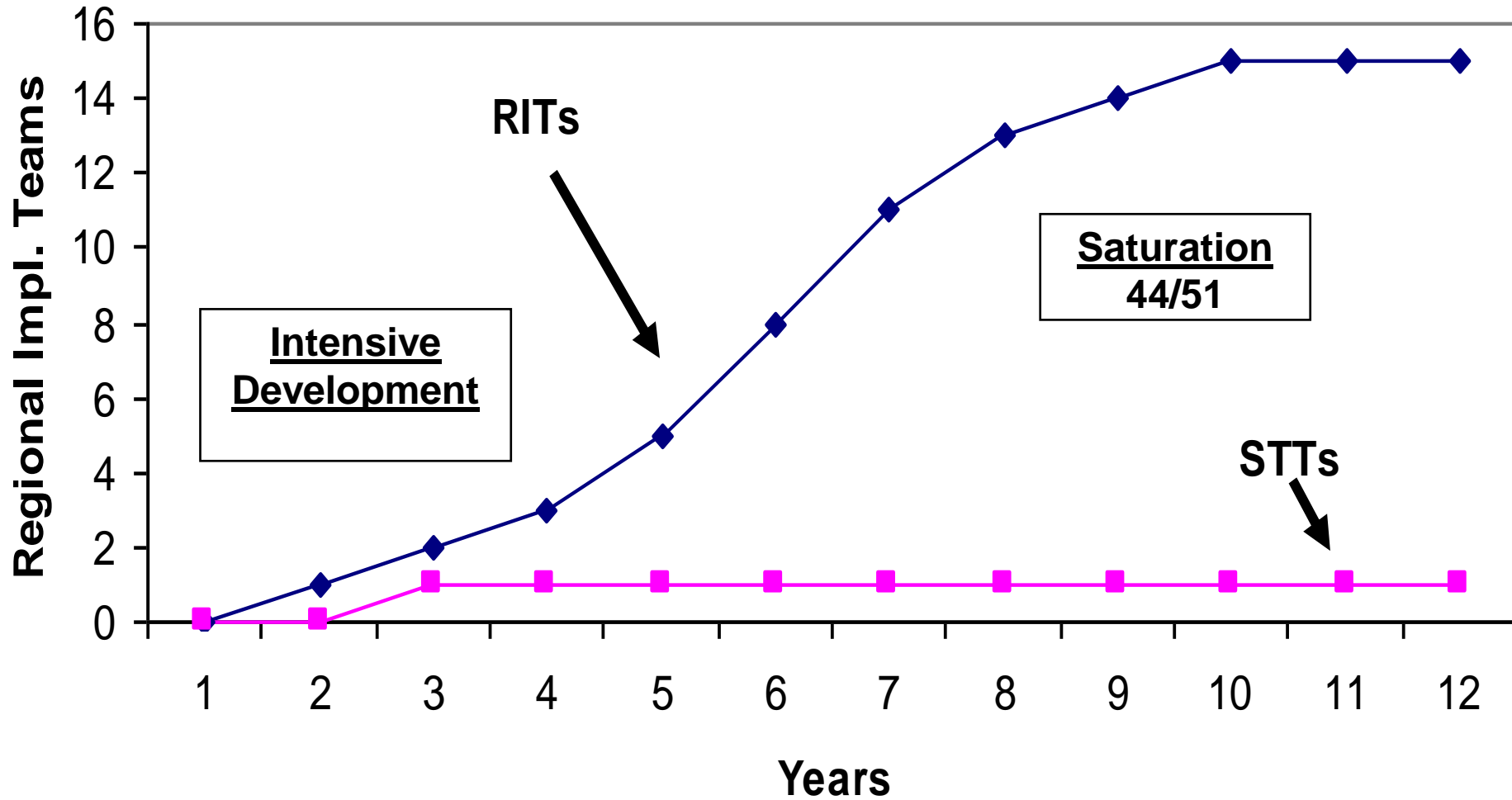
☞ **A group that <u>knows implementation</u> very well (formal and practice knowledge)**

☞ **A group that <u>knows improvement cycles</u> to make intervention and implementation methods more effective and efficient over time**

Implementation Team

Prepare Communities

Prepare schools faculty, staff

Prepare Districts

Implementation Team

Assure Student Benefits

Work with Researchers

Assure Implementation

State Capacity Development

- **y-axis:** Regional Impl. Teams (0 to 16)
- **x-axis:** Years (1 to 12)
- **RITs** (navy line)
- **STTs** (magenta line)
- **Intensive Development**
- **Saturation 44/51**

Key Issues

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- **How to <u>align</u> system structures and functions to fully support scale up efforts as part of "education as usual" (sustainable)**

Sobering Observations

"All organizations [and systems] are designed, intentionally or unwittingly, to achieve precisely the results they get."

R. Spencer Darling
Business Expert

"The tyranny of the status quo."

Fritz Oser
Educator

Problem

- **Innovative practices do not fare well in existing organizational structures and systems**

- **Organizational and system changes are essential to successful use of innovations**
  - **Expect it**
  - **Plan for it**

SISEP Center

State Implementation and Scaling up of Evidence-based Practices (SISEP)

www.scalingup.org

"Just for States"

- ➤ Selection criteria/ rationales
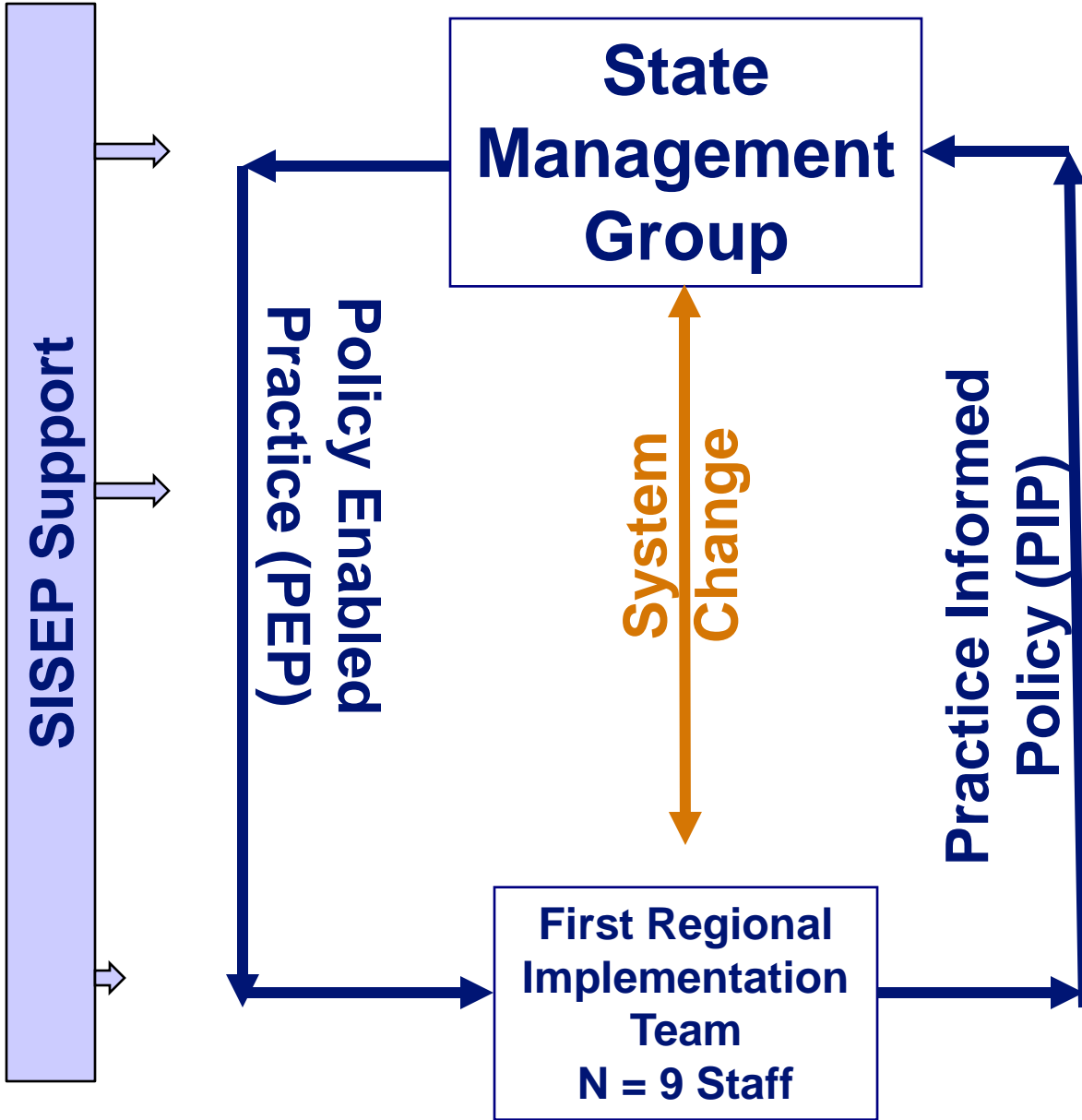
"Resources"

- ➤ Concept paper
- ➤ Annotated bibliography

System Alignment

The <u>SISEP Center</u>

Four years of intensive and focused activity to create capacity and align system structures, roles, and functions
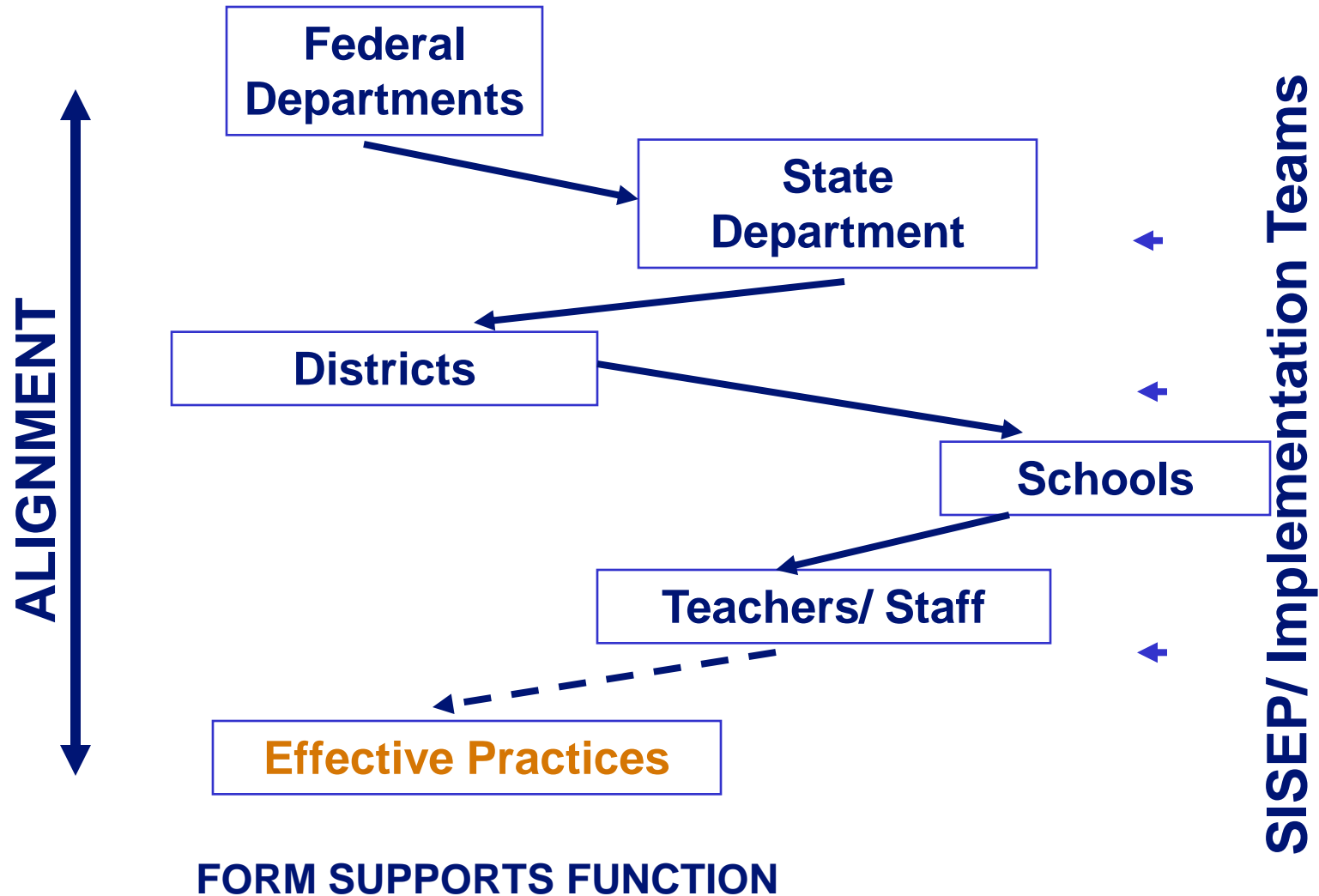
Large scale, real time change

Transformation Zone

SISEP and the State Management Group meet monthly in order to do capacity development in earnest.

- **The first Regional Implementation Team will begin the implementation process in 5 – 10 schools (Transformation Zone)**

- **Repeat the process in subsequent sets of 5 – 10 schools**

- **GOAL: Maximize opportunities for RIT members to learn (CAPACITY DEV.)**

Transformation Zone

ALIGNMENT

Federal Departments → State Department → Districts → Schools → Teachers/ Staff ⇢ Effective Practices

SISEP/ Implementation Teams

FORM SUPPORTS FUNCTION

IMPLEMENTATION CAPACITY FOR SCALING UP EBPs

SISEP Support

State Management Group

State Transformation Team

Regional Implementation Team	Regional Implementation Team	Regional Implementation Team	Regional Implementation Team
N = 50 – 200 Schools	N = 50 – 200 Schools	N = 50 – 200 Schools	N = 50 – 200 Schools
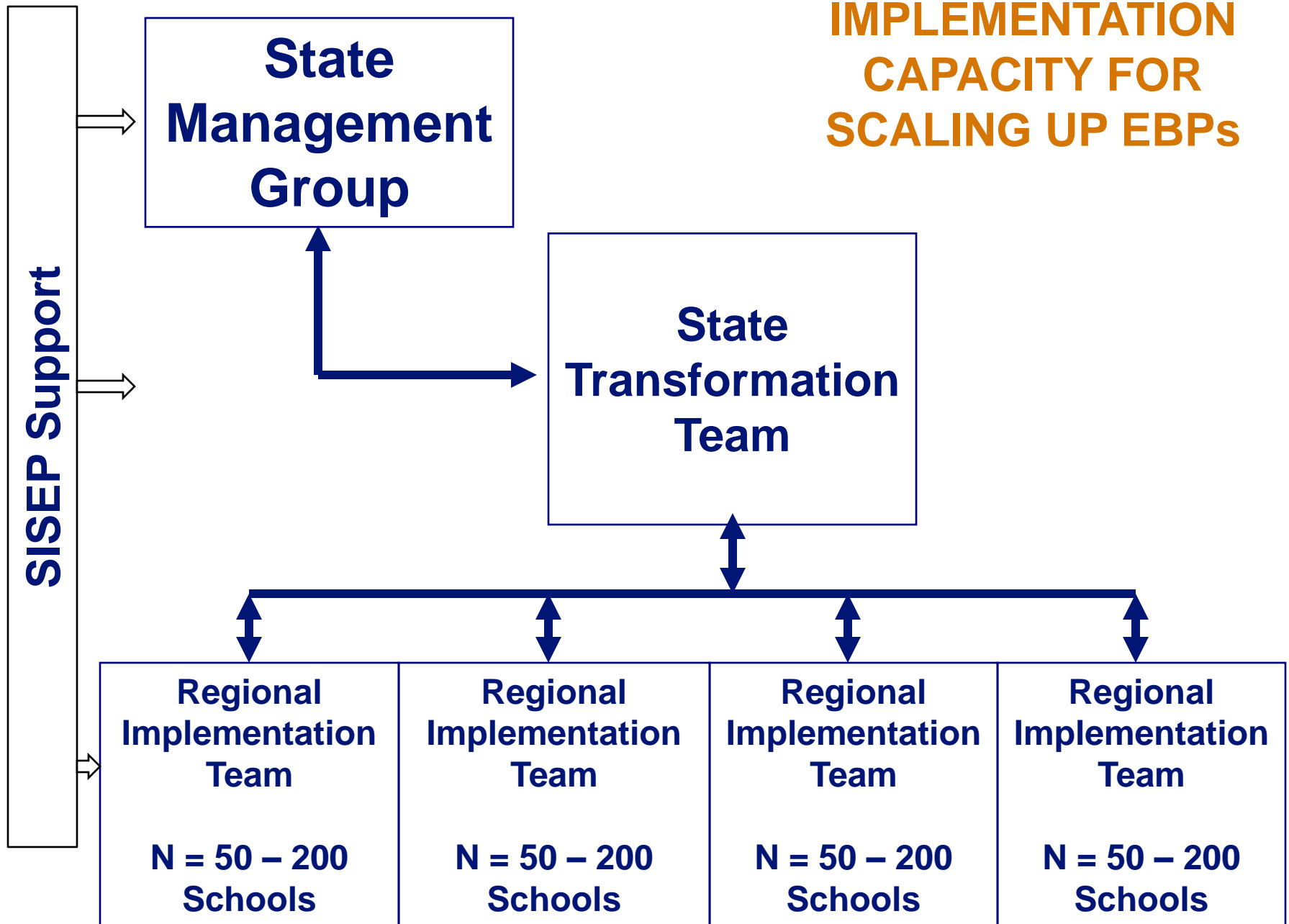
State Capacity Development
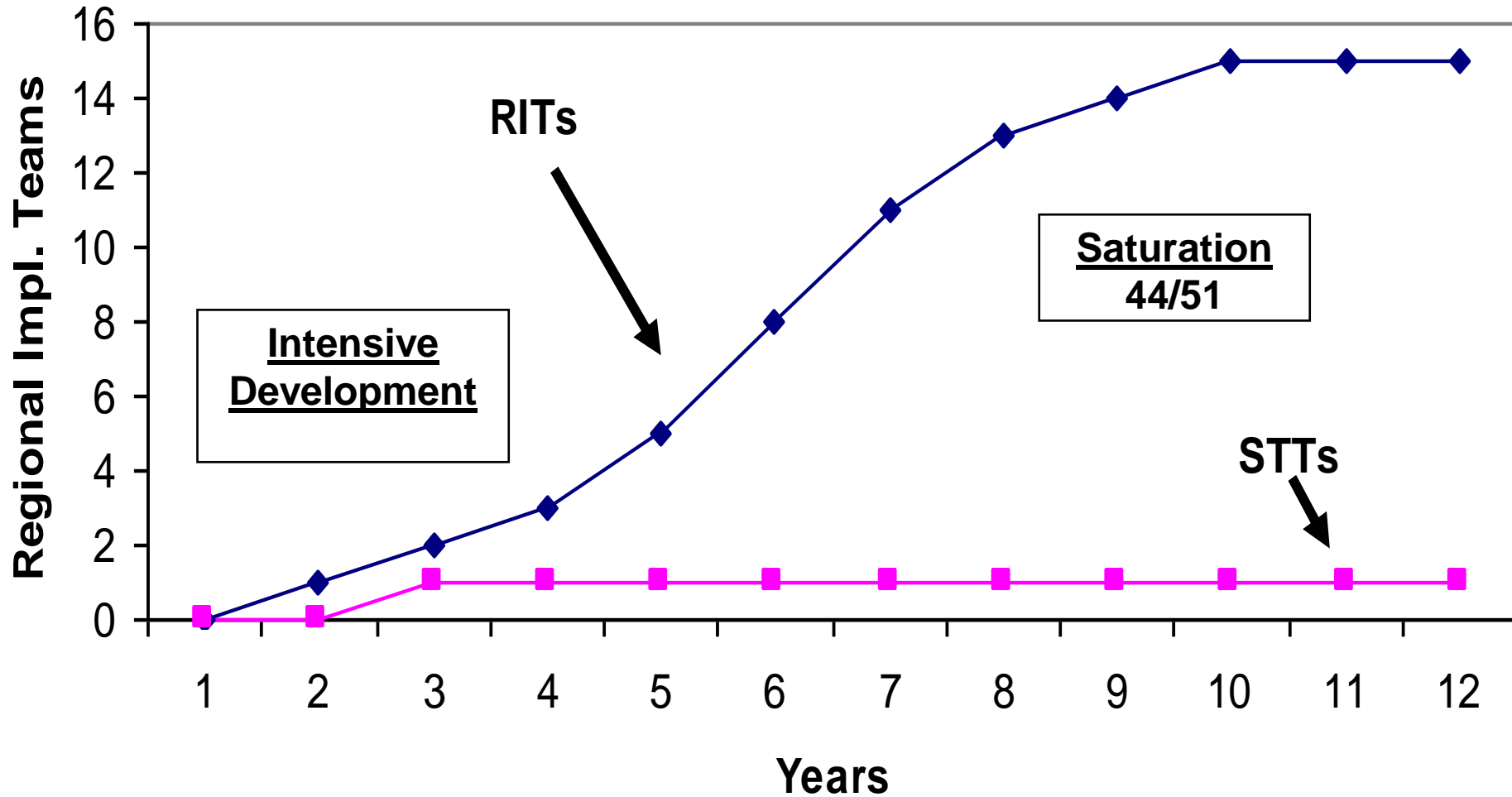
Scale Up

- **Teachers teach students**

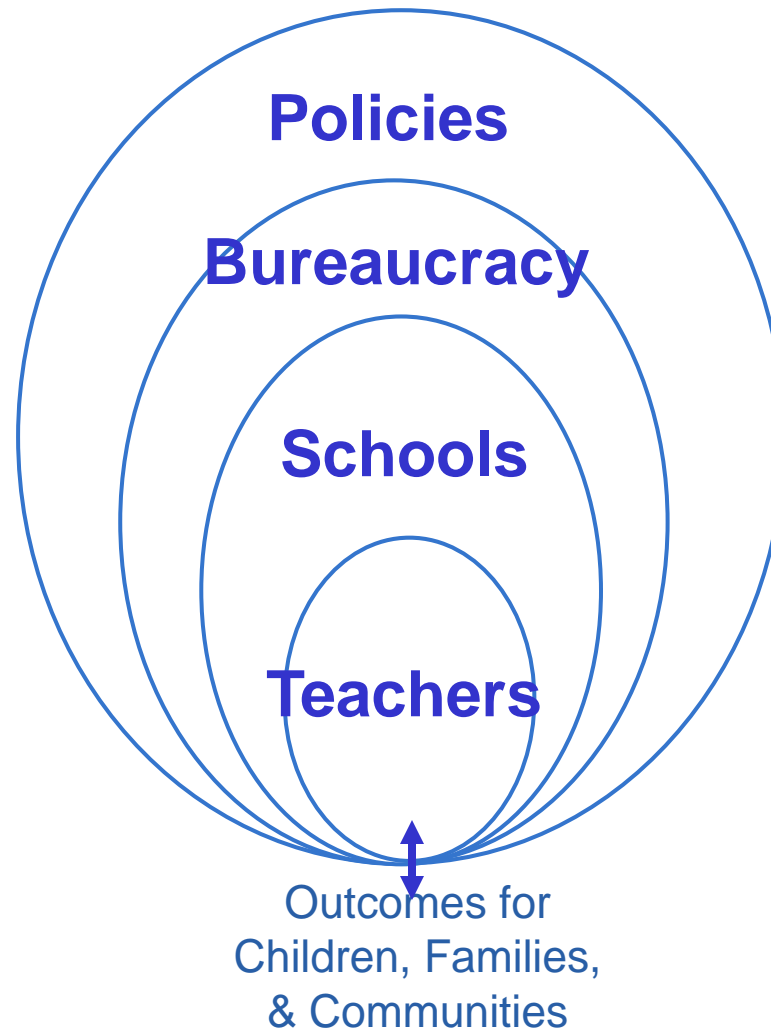 - **Develop teacher competencies (the ability to fully use EBPs)**

- **Schools support teachers**

  - **Change structures, roles, and functions**

- **Systems support schools**

  - **Transform structures, roles, and functions**

Functional Education

Policies

Bureaucracy

Schools

Teachers

Outcomes for
Children, Families,
& Communities

Thank You

We thank the following for their support

- **Annie E. Casey Foundation (EBPs and cultural competence)**

- **William T. Grant Foundation (implementation literature review)**

- **Substance Abuse and Mental Health Services Administration (implementation strategies grants; NREPP reviews; SOC analyses of implementation; national implementation awards)**

- **Centers for Disease Control & Prevention (implementation research contract)**

- **National Institute of Mental Health (research and training grants)**

- **Juvenile Justice and Delinquency Prevention (program development and evaluation grants**

- **Office of Special Education Programs (Capacity Development Center contract)**

- **Agency for Children and Families (Child Welfare Leadership Development contract)**

For More Information

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State Implementation and Scaling up of Evidence-based Practices

National Implementation Research Network

www.scalingup.org

http://www.fpg.unc.edu/~nirn/default.cfm

For More Information

Implementation Research: A Synthesis of the Literature

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature.* Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Download all or part of the monograph at:

http://www.fpg.unc.edu/~nirn/resources/detail.cfm?resourceID=31